

A TEAM APPROACH TO EVALUATING STATE ABANDONED MINE RECLAMATION PROGRAMS

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ABSTRACT

The Surface Mining Control and Reclamation Act of 1977 (SMCRA or the Act) authorizes the Secretary of the Interior to approve and fund State and tribal abandoned mine land (AML) reclamation programs through the Office of Surface Mining (OSM). SMCRA also requires the Secretary, through OSM, to conduct activities necessary to ensure compliance with the Act. OSM's directive AML-22 describes the policies, procedures, and responsibilities OSM should follow to evaluate how States and Indian tribes administer their approved AML programs to ensure that they meet the requirements of SMCRA and the implementing Federal regulations. AML-22 also provides considerable flexibility for structuring and carrying-out those evaluations.

OSM's Denver Field Division (DFD) is responsible for evaluating the Colorado Inactive Mine Reclamation Program and the Utah Abandoned Mine Reclamation Program. Since 1996, the "Colorado-Utah AML Review Team" (our team) has been conducting those evaluations annually on OSM's behalf. Our members include representatives of the Colorado and Utah Programs and DFD. We decide what topics to review, conduct the reviews, make findings and recommendations, and complete evaluation reports.

In evaluation year 2001, we evaluated three performance measures for each State program. Those measures evaluated: Whether completed reclamation met project goals; if the States' project ranking and selection processes evolved to meet their programs' changing needs, and if so, how; and, if the States obligate their grant funds in a timely manner. We concluded that both Programs' reclamation met project goals and the States' obligation rates were satisfactory. We also found that the Programs' changing needs prompted refinements in one ranking and selection process while prompting the need for an AML plan amendment to recognize changes in the other.

INTRODUCTION TO EVALUATING AML PROGRAMS

Section 102(h) of SMCRA says one purpose of the law is to "promote the reclamation of mined areas left without adequate reclamation prior to the enactment of [SMCRA] and which continue, in their unreclaimed condition, to substantially degrade the quality of the environment, prevent or damage the beneficial use of land or water resources, or endanger the health or safety of the public * * *." Title IV of SMCRA created the Abandoned Mine Reclamation Fund (the Fund). Active coal mine operators pay fees on each ton of coal they produce, and those fees comprise the Fund. SMCRA authorized the Secretary of the Interior to approve programs to reclaim abandoned coal and noncoal mines in States that have approved programs to regulate active coal mining ("primacy states") as one means of fulfilling the purpose of section 102(h). In the Supplemental Appropriations Act of 1987, Congress gave the Secretary authority to approve three tribal AML programs. To date, the Secretary approved 23 State and 3 tribal AML programs under SMCRA. The Colorado Inactive Mine Reclamation Program has been operating

since its approval on June 11, 1982. Utah's Abandoned Mine Reclamation Program has been operating since its June 3, 1983, approval.

OSM awards grants from the Fund to Indian tribes and States to pay their AML programs' administration and reclamation costs. The Abandoned Mine Reclamation Act of 1990 amended SMCRA to, among other things, expand provisions for noncoal abandoned mine reclamation under title IV and to authorize funding of projects to address acid mine drainage, to assist communities impacted by past mining and processing, and to address the need for activities or public facilities in States impacted by the mining industry. The Energy Policy Act of 1992 extended collection of the fees on coal production to September 30, 2004.

Events of the early to mid-1990's laid the groundwork for our approach to evaluating AML programs. The Government Performance and Results Act (August 3, 1993) and reductions in Federal spending at the time required OSM to look at different ways of accomplishing its mission and measuring performance. One result was OSM's "environmental restoration business line" that encompasses Federal, State and tribal AML reclamation programs funded under SMCRA. Its goal is to cooperate with States and tribes to reclaim abandoned mine lands while measuring performance toward achieving that goal. A reorganization that followed in mid-1995 significantly reduced OSM's resources. The reorganization also transferred responsibility for evaluating the Colorado and Utah AML programs to the newly created Denver Field Division in the Western Regional Coordinating Center. OSM adopted use of self-directed teams to carry out many of its functions in response to these new challenges. Another change in operating procedures occurred on November 20, 1995, when OSM put Directive AML-22 into effect.

Directive AML-22 describes OSM's policies, procedures, and responsibilities for evaluating State and tribal AML programs under SMCRA. AML-22 calls these evaluations "enhancement and performance reviews." Those reviews evaluate and help States and Indian tribes administer, implement, and maintain their approved reclamation programs to ensure that they meet the requirements of SMCRA and the implementing regulations. OSM previously called this activity "oversight." AML-22 establishes Programmatic Agreements (PA's) as the basis for the commitment OSM, States, and Indian tribes share toward achieving their common goal of successful AML reclamation. As such, PA's establish the framework for annual AML program evaluations and are to be developed in cooperation with States and tribes. They include "principles of excellence" that evaluators can use as guidelines for conducting enhancement and performance reviews. PA's describe what aspect of programs to review, how to measure performance under each principle ("performance measures"), the logistics of conducting reviews, and how findings and recommendations will be made. They should emphasize on-the-ground results and consider each program's unique character. AML-22 suggests several principles of excellence and performance measures. While OSM is responsible for evaluating AML programs under the directive, AML-22 provides flexibility for doing so.

DESCRIPTION OF OUR TEAM AND EVALUATION PROCESS

Using a team to evaluate SMCRA-funded AML programs is not unique. An informal review of annual evaluation reports dating from 1998 through 2001 posted on OSM's website (<http://osmre.gov/report01.htm>, for 2001) showed that, of 26 AML programs evaluated, teams apparently conducted parts or all of at least 10 State and tribal program evaluations during those four years. The actual number may be higher given the possibility that some reports did not describe team involvement in the evaluations. In many cases, OSM appears to have developed

performance agreements or work plans in cooperation with States or tribes but performed the subsequent evaluation(s) itself. Where teams were noted, many appeared to be “ad hoc” teams assembled for a one-time review of a specific topic or topics. Some teams included personnel from States or Indian Tribes and OSM. Our use of a standing team to plan and perform evaluations in their entirety under a multi-year performance agreement is less common and distinguishes our approach from most others’.

OSM formed the “Colorado-Utah AML Review Team” in January 1996. We report to the OSM-DFD chief. Our State and Federal members jointly attended team training that Vantage Human Resources, Inc., of Lakewood, Colorado, presented in 1997. Originally, team members included two representatives from the Utah program, one from Colorado’s program, and four staff members of OSM-DFD. One OSM-DFD member served as the team leader. Membership changed in the team’s second, third, and fourth years, but we retained four members for the last two years. Presently, team members include the administrator of the Utah Program, the supervisor of the Colorado Program, one OSM grants specialist, and one OSM environmental specialist. Our Utah and Colorado members are the only original members still on the team. We discuss whether or not to rotate the team leader role at the beginning of each evaluation year. Some of our evaluations require assistance from specialists on the State Programs’ staffs. Occasionally, our State members function as team members and topic specialists during our reviews. This approach makes our roles and interaction more complex and challenges each member’s objectivity.

Our team signed its first Performance Agreement on May 2, 1996. That PA included: A statement of its purpose; descriptions of member responsibilities; three principles of excellence and a total of 17 performance measures (called “performance elements” at that time); and members’ signatures. (See Attachment 1 for a description of the original three principles of excellence and the performance measures.) The PA also included each measure to be evaluated in the first and second years for the respective principles. It described each principle and performance measure, background information pertinent to the review, the review populations and samples, how the reviews were to be conducted and reported, and the review schedules. Our first PA initially covered the 1996 and 1997 evaluations. We completed the first annual summary evaluation reports in November 1996.

The Performance Agreement changed over time just as our team changed. AML-22 encourages OSM to tailor its evaluations to the needs and unique character of each program. It also encourages conducting evaluations that provide meaningful feedback to States and tribes. In 1998, we revised our Agreement to extend through the 2002 evaluation year. At that time, we also made significant changes to the principles of excellence and performance measures to reflect those topics of greatest interest and benefit to Colorado, Utah, and OSM. Though the current Agreement spans five years, we review it annually to make any necessary changes. We completed enhancement and performance review reports and summary evaluation reports each year through 2001 to date. Despite the numerous content changes, the PA’s overall format remains relatively unchanged. Attachment 1 describes the changes we made to the principles of excellence and performance measures. It also shows the principles of excellence and performance measures we evaluated since our team was formed. We will change the PA again after it expires on September 30, 2002.

Our team holds meetings once or twice each evaluation year in addition to our field and office reviews. We meet at the beginning of each evaluation year to update the Performance Agreement, principles of excellence, and performance measures. At that time, we also discuss

evaluation samples, decide if we will need extra help, and schedule field and office reviews. We schedule meetings and field evaluations months in advance or risk not being able to convene our members on short notice. Changing our plans later in the year can be difficult. On the other hand, meeting and jointly evaluating on-the-ground reclamation enables us to benefit from our different perspectives and combined knowledge. We interact informally throughout the year by telephone, electronic mail, and during office visits that coincide with other business.

Office reviews usually focus on activities that influence the States' ability to effectively administer their programs and conduct on-the-ground reclamation. Such evaluations involved grants, contracting, project ranking and selection, and others as shown in Attachment 1. When possible, we schedule office reviews to avoid interrupting the States' construction season and to ensure that staff specialists will be available if needed.

Our OSM members write evaluation reports based on the team's observations and reviews. All team members review and comment on our reports. Enhancement and performance review reports present our findings and recommendations in great detail. Those reports, in turn, provide the factual support for summary annual evaluation reports. The team leader sends summary annual reports to OSM headquarters in Washington, D.C., where they are posted on OSM's website. We decided to not combine our annual summary evaluation reports for the Colorado and Utah programs with evaluations of the respective States' coal regulatory programs operated under title V of SMCRA.

The observations, findings and recommendations we make provide quick feedback to our State members in their roles as managers of the Colorado and Utah Programs. We have the responsibility and authority to make recommendations to the State AML programs and to OSM. However, we do not have authority as a team to require the States to implement our recommendations. We develop our findings and recommendations through consensus. That helps our recommendations survive the transition from our reports to the State programs' planning. It is incumbent on us as team members to encourage correction of problems if recommended but the ultimate responsibility for resolving them rests with us in our individual roles as State and OSM employees. We realize our team has not been fully "tested" on its ability to reach consensus on contentious issues. So far, we have not yet encountered an issue that was so problematic we could not reach consensus on it. On the other hand, that might be the strongest evidence yet of the Colorado and Utah AML programs' overall success.

SUMMARY OF OUR 2001 EVALUATIONS

We reviewed the same principles of excellence and performance measures for the Colorado and Utah programs in the 2001 evaluation year.

Principle of excellence 1 was "the State's on-the-ground reclamation is successful." Our reviews of performance measure (a) (our "1(a)" review) determined if reclamation met project goals. The review populations included projects funded for construction in 1998, 1999, and 2000. The review samples included two coal and nine noncoal projects in one State and two coal and three noncoal projects in the other. Reclamation of all projects was complete. We compared the States' reclamation to their project specifications and other documentation for each project visited. We determined if projects complied with conditions resulting from interagency consultation (if evident) on issues involving threatened and endangered species, cultural resources and other values and if they improved overall site conditions compared to pre-reclamation conditions. Overall, though, we focused on whether reclamation continued to abate

the original hazards. We looked for specific reclaimed hazards or other aspects of reclamation while empirically evaluating overall site conditions. If we found problems, we discussed them and decided if they were hazardous or not and if maintenance was needed to correct them.

Our 1(a) evaluations found that projects we visited in both States met their respective goals. We also observed that the Programs' reclamation protected wildlife habitat and species by constructing gated closures and by reestablishing riparian vegetation. We also noted where the Programs avoided disturbing historically significant structures or preserved it during the course of reclamation. Only one gated closure on a mine opening in one State required maintenance and a second required monitoring, both due to vandalism. In the other State, we found only one mine closure that needed maintenance and two others where continued monitoring was advisable. We recommended that the respective Programs perform the necessary maintenance and monitoring, which they are planning.

Principle of excellence 2 was "the State AML programs' procedures are efficient and effective." Reviewing performance measure (a) (our "2(a)" review) looked at whether each States' project ranking and selection evolved to meet the their Programs' changing needs, and if so, how it evolved. The review populations included all coal and noncoal projects funded for reclamation in grants OSM awarded to the States since the Secretary approved their Programs. Our review samples included 13 projects funded for reclamation in one State's 1998, 1999, and 2000 grants and 38 projects funded in the same years' grants for the other State. We looked at how the States' existing processes ranked coal and noncoal projects they selected for reclamation under those grants. If selected projects did not rank high compared to others, we examined the reasons why the Programs selected them. We also looked at whether the Programs believed their existing processes let them select those projects most in need of funding or whether they considered other factors to do so. Experience in Colorado and Utah shows that a number of factors have become obvious in the course of project ranking and selection, particularly with respect to noncoal hazards. Factors such as shifts in population centers, changes in access resulting from increasing road density, and diverse and dispersed outdoor recreation have an increasing influence on the degree to which abandoned mines, especially noncoal mines, pose hazards to public health and safety.

We found that one State followed its approved process to rank and select the sample projects we reviewed. We also found that this State generally addresses its most hazardous problems before it considers other less hazardous sites. While the Program followed the State's approved process, we found that it perceived a need to improve the process to make it more objective for selecting noncoal projects. The Program developed a Geographic Information Systems (GIS)-based "noncoal planning process" within the overall framework of its approved process to make its noncoal project selections more objective and quantifiable. The process generates composite maps that enable the Program to preliminarily select noncoal projects almost at a glance and target areas most in need of abatement with greater confidence. In viewing composites generated by the time of our evaluation, we noted that the new process substantially validated the Program's past, more "intuitive" selections of noncoal projects it reclaimed.

In the second State, our 2(a) evaluation found that the Program followed part of the ranking and selection process described in its approved plan but did not follow other parts of the process that its experience showed to be impractical. We concluded that the State's formal ranking and selection process has not changed to meet the Program's needs. On the other hand, we found that the informal process the Program used gave subjective consideration to changing

factors (such as those mentioned above) that influence the degree to which abandoned mines are hazardous. The Program prioritized all 38 sample projects. However, we were unable to determine if those projects addressed the most hazardous problems in the State that existed at the time the Program selected them or how they compared to each other because they were not objectively ranked. The Program believes its informal process meets its needs and works well being based on subjective, professional judgment. It also believes an “objective ranking” process would, in most cases, support the projects it selects under the “subjective judgment” process it uses. At the same time, the Program recognizes the need to amend its plan to describe the process it will follow. We recommended that the State revise its plan to describe the criteria it will use to rank and identify projects as required by 30 CFR 884.13. To do so, the State decided to revise an AML plan amendment currently pending with OSM.

The third principle of excellence was “the State must have systems to properly manage AML funds.” Our review of performance measure (f) (our “3(f)” review) determined if Colorado and Utah obligate their SMCRA grant funds in a timely manner. The review populations included all active AML grants OSM awarded to the States in the 1998, 1999, and 2000 Federal fiscal years. We began by determining how the States obligate their funds within their respective accounting systems. We met with Program and other staff responsible for tracking contractual obligations using AML grant funds that OSM awards to the States. In addition, we reviewed and discussed administrative costs, major purchases, contracting costs and samples of actual obligations. We found both States’ obligation rates to be timely and acceptable. One State’s obligation rate was 97.22 percent at the end of fiscal year 2000; at the time of our review, it was 97.8 percent. The other State’s obligation rate was 86.08 percent at the end of fiscal year 2000 and 88.4 percent at the time of our review. Our evaluations concluded that obligation rates are a valid measure of how States spend grant funds though some administrative factors affect how AML programs and OSM perceive obligation rates. We did not recommend any changes in how the States obligate their grant funds as a result of our evaluations.

ATTACHMENT 1

PERFORMANCE AGREEMENT PRINCIPLES OF EXCELLENCE AND PERFORMANCE MEASURES

1996 & 1997 PERFORMANCE AGREEMENTS – PRINCIPLES OF EXCELLENCE & PERFORMANCE MEASURES	YEAR & STATE EVALUATED
1: The State's on-the-ground reclamation is successful.	
a: Does completed reclamation meet the goals of the project?	UT: '96 thru '97; CO: '97
b: Is reclamation successful on a long-term basis?	CO: '96; UT: '97
2: The State must have an approved reclamation plan that meets the requirements of Federal laws and regulations and must conduct reclamation in accordance with its plan.	
a: Does the current plan meet the requirements of SMCRA, the regulations and other applicable laws? Does the State AML program work cooperatively with OSM to establish a schedule and make necessary changes to the plan?	CO: '96 thru '97 UT: '96 thru '97
b: Does the State AML program comply with OSM Directive AML-1 (AML Inventory?)	
c: Does the State AML program comply with its plan for project ranking and selection?	
d: Does the State AML program follow the reclamation requirements of the plan?	
e: Are the State contracting procedures being followed?	CO: '97; UT: '97
f: Does the State AML program perform the AVS check as required on the successful bidder at the time of contract award?	CO: '97; UT: '97
g: Does the State AML program comply with NEPA as required?	
3. The State must have systems in place to ensure accountability and responsibility for spending AML funds and a process to assure that such systems are working.	
a: Are drawdowns and disbursements of monies accomplished in accordance with requirements for Federal funds?	
b: Is State AML program income accounted for properly?	
c: Are grant applications and reports submitted timely?	
d: Are State procedures for property procurement, management and disposal of property followed?	
e: Do the state internal control systems work?	
f: Are audits conducted by the State in accordance with the Federal Single Audit Act of 1984? Does the State cooperate with OSM in audit resolution?	
g: Do State AML program managers have adequate financial information to manage the projects and the program?	UT: '96 thru '97; CO: 1997
h: Are the costs of State AML program activities appropriately documented and supported?	

ATTACHMENT 1 (cont'd)

'98, '99, 2000, 2001, 2002 PERFORMANCE AGREEMENTS - PRINCIPLES OF EXCELLENCE & PERFORMANCE MEASURES	YEAR & STATE EVALUATED
1: The State's on-the-ground reclamation is successful	
a: Does completed reclamation meet the goals of the project?	CO: '99, 2001 UT: '99, 2001
b: Is reclamation successful on a long-term basis?	CO: '98, 2000, 2002 UT: '98, 2000, 2002
c: Do the State's monitoring and maintenance procedures effectively ensure successful reclamation? <i>(new performance measure added for future evaluation, but not scheduled for review in 2002)</i>	
2: The State AML program procedures are efficient and effective.	
a: Has the State's project ranking and selection evolved to meet the State program's changing needs? If so, how? <i>(revised and replaced the '98 version in 2001, which read, "Is the State process for project ranking and selection still valid?" That '98 version replaced the '96-'97 version of 2(a) and revised the '96-'97 version of 2(c))</i>	CO: 2001; UT: 2001
b: Can the State's contracting procedures be improved to be more responsive to program needs? <i>(revised and replaced former 2(e) in '98)</i>	CO: '99; UT: '99
c: Is the State's Authorization to Proceed submittal, and OSM's response, efficient in allowing the State to proceed with construction as planned? <i>(revised and replaced former 2(g) in '98)</i>	CO: '98; UT: '98
<i>*(performance measures 2(b), (d), and (f) from the 1996-'97 Agreement were deleted in '98)</i>	
3. The State must have systems to properly manage AML funds <i>(revised and replaced former principle 3 in '98)</i>	
a: Is State AML program income accounted for properly? <i>(formerly 3(b) in '97)</i>	
b: Can the grant application and report procedures be improved? <i>(revised and replaced former 3(c) in '98)</i>	
c: Are State procedures for property procurement, management and disposal of property effective? <i>(revised and replaced former 3(d) in '98)</i>	
d: Do State AML Program managers have adequate financial information to manage the projects and the program? <i>(revised and replaced former 3(g) in '98)</i>	CO: '98
e: Are the costs of State AML program activities appropriately documented and supported? <i>(formerly 3(h) in '97)</i>	CO: '99 -2000; UT: '99 – 2000
f: Is the State obligating its grant funds in a timely manner? <i>(new performance measure added for 2001)</i>	CO: 2001; UT: 2001
g: Do the State's procedures for managing set-aside funds support the intent of SMCRA? <i>(new performance measure added for 2002)</i>	CO: 2002; UT: 2002
<i>*(performance measures 3(a), (e), and (f) from the '96-'97 Agreement were deleted in '98)</i>	

REFERENCES

- Abandoned Mine Reclamation Act of 1990; P.L. 101-508 (November 5, 1990)
- Annual Summary Evaluation Report of the Colorado-Utah Abandoned Mine Land Review Team for the Colorado Inactive Mine Reclamation Program for Evaluation Year 2002 (November 20, 2001)
- Annual Summary Evaluation Report of the Colorado-Utah Abandoned Mine Land Review Team for the Utah Abandoned Mine Reclamation Program for Evaluation Year 2002 (November 20, 2001)
- Colorado Inactive Mine Reclamation Plan (June 11, 1982)
- Colorado Inactive Mine Reclamation Program 2001 Enhancement and Performance Review Reports (1(a), September 5, 2001; 2(a), October 25, 2001; 3(f), September 18, 2001)
- Colorado-Utah AML Review Team Performance Agreement (rev. 1/7/02)
- Energy Policy Act of 1992; P.L. 102-486 (October 24, 1992)
- Evaluation of State and Tribal Abandoned Mine Land Programs, OSM Directive AML-22 and 22-1, Transmittal Nos. 840 and 872, respectively (November 20, 1995, and October 6, 1997, respectively)
- Government Performance and Results Act; P.L. 103-62 (August 3, 1993)
- Supplemental Appropriations Act, 1987; P.L. 100-71 (July 11, 1987)
- Surface Mining Control and Reclamation Act, as amended; P.L. 95-97; (August 3, 1977)
- Utah Abandoned Mine Reclamation Plan (June 3, 1983)
- Utah Abandoned Mine Reclamation Program 2001 Enhancement and Performance Review Reports (1(a), September 5, 2002; 2(a), September 24, 2001; 3(f), September 18, 2001)